

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
13 May 2004 (13.05.2004)

PCT

(10) International Publication Number
WO 2004/039724 A1

- (51) International Patent Classification⁷: C01B 33/26 (74) Agent: HONORE, Anne-Claire; Kodak Industrie, Département Brevets, CRT - Zone Industrielle, F-71102 Chalon sur Saône Cedex (FR).
- (21) International Application Number: PCT/EP2003/007579
- (22) International Filing Date: 14 July 2003 (14.07.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
0209085 18 July 2002 (18.07.2002) FR
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- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A METHOD FOR PREPARING AN ALUMINOSILICATE POLYMER AND THE POLYMER RESULTING FROM THIS METHOD

(57) Abstract: The present invention relates to a method for preparing an aluminosilicate polymer and the polymer resulting from this method. Said method consists in treating an aluminum halide with an alkyl orthosilicate only having hydrolyzable functions with an aqueous alkali, in the presence of silanol groups, aluminum concentration being maintained at less than 0.3 mol/l, the Al/Si molar ratio being maintained between 1 and 3.6 and the alkali/Al molar ratio being maintained between 2.3 and 3; and then in stirring the resulting mixture at ambient temperature in the presence of silanol groups for long enough to form the aluminosilicate polymer.

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/07579

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C01B33/26

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C01B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 1 112 959 A (EASTMAN KODAK COMPANY) 4 July 2001 (2001-07-04) cited in the application the whole document	1-19
A	EP 0 895 965 A (EASTMAN KODAK COMPANY) 10 February 1999 (1999-02-10)	
A	WO 96 13459 A (EASTMAN KODAK COMPANY) 9 May 1996 (1996-05-09)	

☐ Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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Date of the actual completion of the international search

4 November 2003

Date of mailing of the international search report

14/11/2003

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/07579

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 1112959	A	04-07-2001	FR 2802912 A1	29-06-2001
			US 2002085972 A1	04-07-2002
			EP 1112959 A1	04-07-2001
			JP 2001226114 A	21-08-2001
EP 0895965	A	10-02-1999	FR 2767128 A1	12-02-1999
			DE 69801966 D1	15-11-2001
			DE 69801966 T2	16-05-2002
			EP 0895965 A1	10-02-1999
			JP 11130421 A	18-05-1999
			US 6296825 B1	02-10-2001
			US 2001046467 A1	29-11-2001
WO 9613459	A	09-05-1996	DE 69518909 D1	26-10-2000
			DE 69518909 T2	05-04-2001
			WO 9613459 A1	09-05-1996
			EP 0741668 A1	13-11-1996
			JP 9507826 T	12-08-1997
			US 5888711 A	30-03-1999